

NATURAL RESOURCES CONSERVATION SERVICE
PACIFIC BASIN AREA
CONSERVATION PRACTICE STANDARD

FIELD BORDER

(Meters, Feet)

CODE 386

DEFINITION

A strip of permanent vegetation established at the edge or around the perimeter of a field.

PURPOSES

- Reduce erosion from water;
- Soil and water quality protection;
- Management of harmful insect populations; and,
- Provide wildlife food and cover.

CONDITIONS WHERE PRACTICE APPLIES

At the edges of cropland fields and to connect other buffer practices within the field. May also apply to recreation land or other land uses where agronomic crops are grown.

CRITERIA

General Criteria Applicable to All Purposes

Minimum field border widths shall be based on local design criteria specific to the purpose or purposes for installing the practice.

The field borders will be established to adapted species of permanent grass, legumes, and/or shrubs.

Field borders will be established around the field edges to the extent needed to meet the resource needs and producer objectives.

Plant material, seedbed preparation, seeding rates, dates, depths, and planting methods will be consistent with approved local criteria as set in the Pacific Basin standard Critical Area Planting, (342).

Ephemeral gullies and rills present in the planned border area will be smoothed as part of seedbed preparation.

Additional Criteria to Reduce Erosion From Wind and Water: Water Erosion Reduction

Locate borders around entire perimeter of the field, or as a minimum, install borders to eliminate sloping end rows, headlands, and other areas where concentrated water flows will enter or exit the field.

Additional Criteria to Protect Soil and Water Quality: Reducing Runoff and Increasing Infiltration

Locate borders around entire perimeter of the field, or as a minimum, install borders to eliminate sloping end rows, headlands and other areas where concentrated water flows will enter or exit the field.

Maintaining Field Setback Distances For Manure and Chemical Applications

Border widths will be designed to conform to minimum field application setback widths established by state or local regulations.

Sediment Trapping

Locate borders around the entire perimeter of the field, or as a minimum, in areas where runoff enters or leaves the field.

Reducing Field Border Soil Compaction from Equipment Parking and Traffic

Border widths will be designed to accommodate equipment parking, loading/unloading equipment, harvest/maintenance operations, etc.

Additional Criteria for Management of Harmful Insect Populations.

Provide a Harbor for Beneficial Insects

Include herbaceous plants that attract beneficial insects. See planning considerations for including shrubs.

Mowing, harvesting, and pesticide applications will be scheduled to accommodate life cycle requirements of the beneficial insects.

Provide a Habitat to Cause Pest Insects to Congregate

Select plants for the field border that attract pest insects.

Use mechanical, cultural, and/or chemical techniques to reduce pest populations when and where they congregate in the field border.

Additional Criteria To Provide Wildlife Food And Cover

Plants that provide wildlife food and cover shall be used. Mowing, harvest, and weed control activities within the field border will be scheduled to accommodate reproduction and other requirements of target wildlife species.

PLANNING CONSIDERATIONS

Field borders are more effective and provide more environmental benefits when planted around the entire field.

Field borders enhance the aesthetics and provide stability around the field edge. They also provide turn and travel areas for equipment and reduce airborne dust.

To increase trapping efficiency, consider establishing a narrow strip of stiff-stemmed upright grass at the crop/field border interface.

Field borders can be used to comply with required field setback distances applicable to manure and chemical applications.

Wildlife enhancement and other benefits of native plants should be discussed during planning.

Native species should be used when feasible to meet producer objectives.

Consider overseeding the border with legumes for plant diversity and wildlife benefits.

Schedule mowing, harvesting, and weed control to accommodate wildlife nesting needs and other special requirements or purposes.

Waterbars or berms may be needed to breakup or redirect concentrated water flows within the borders.

If bank stabilization is a concern, select fibrous deep-rooted plants.

Consider plants tolerant to sediment deposition and chemicals planned for application.

Rows of shrubs adjacent to field borders will often enhance field borders ability to harbor beneficial insects, and may also provide additional wildlife benefits.

If installation or maintenance of the practice has the potential to affect cultural resources (archaeological, historic, historic landscape, or traditional cultural properties), follow NRCS state policy for considering cultural resources.

PLANS AND SPECIFICATIONS

Plans and specifications are to be prepared for the practice site. Refer to plant species referenced in Section I of the FOTG or appropriate Pacific Basin technical notes or supplements.

The following items should be specified. Use a job sheet if available, other wise record in the conservation plan, to document these items:

1. Border widths and lengths based on local design criteria.
2. Location within the field or farm boundary.
3. Vegetation to be used.
4. Site preparation.
5. Planting method.
6. Liming or fertilizer requirements.
7. Operation and maintenance requirements.

OPERATION AND MAINTENANCE

Field borders require careful management and maintenance for performance and longevity.

The following will be planned and applied as needed:

1. Storm damage repair.
2. Sediment removal - when 6 inches (15 cm) of sediment have accumulated at the field border/cropland interface.
3. Shut off sprayers and raise tillage equipment to avoid damage to field borders.